

We claim:

1. A substantially purified nucleic acid molecule having a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 52202 or complements thereof.

5 2. A substantially purified nucleic acid molecule, said nucleic acid molecule capable of specifically hybridizing to a second nucleic acid molecule having a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 52202 or complements thereof.

3. The substantially purified nucleic acid molecule according to claim 2,  
10 wherein said nucleic acid molecule comprises a microsatellite sequence.

4. The substantially purified nucleic acid molecule according to claim 2,  
wherein said nucleic acid molecule comprises a region having a single nucleotide polymorphism.

5. A substantially purified nucleic acid molecule encoding a protein or  
15 fragment thereof, wherein said protein or fragment thereof is selected from the group consisting of a rice protein or fragment thereof from Table 1.

6. The substantially purified nucleic acid molecule according to claim 5,  
wherein said rice protein or fragment thereof is a homologue of a dicot plant protein or fragment thereof.

20 7. The substantially purified nucleic acid molecule according to claim 5,  
wherein said rice protein or fragment thereof is a homologue of a non-rice monocot plant protein or fragment thereof.